METHOD AND SYSTEM FOR A MODULAR TRANSMISSION CONTROL PROTOCOL (TCP) FREQUENT-HANDOFF DESIGN IN A STREAMS BASED TRANSMISSION CONTROL PROTOCOL INTERNET PROTOCOL (TCP/IP) IMPLEMENTATION

ABSTRACT OF THE INVENTION

A method and system for handing-off TCP states in a communication network. Specifically, the present invention allows for handing-off TCP states between nodes in an associated network that is optimized for frequent handoff of TCP states. The handoff occurs between dynamically loadable modules that wrap around the TCP/IP stack located at a front-end server and a selected back-end server. A handoff protocol implemented by the loadable modules works within the kernel level of the existing TCP/IP code. As such, no changes to the existing TCP/IP code is necessary. The loadable modules at the front-end are able to select a back-end server depending on the content of the HTTP request, coordinate handing off TCP states, and forward packets to the back-end server. Loadable modules at the selected back-end modify response packets to reflect the proper TCP state of the front-end server.